

The opinion in support of the decision being entered today is not binding precedent of the Board.

Paper 13

UNITED STATES PATENT AND TRADEMARK OFFICE

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BEFORE THE BOARD OF PATENT APPEALS  
AND INTERFERENCES

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Ex parte DAVID A. BARKER, THOMAS C. FORSCHNER  
and RANDALL L. SHEARER

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Appeal 1997-2360  
Application 08/234,495<sup>1</sup>

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Before: McKELVEY, Senior Administrative Patent Judge, and  
SCHAFFER and LEE, Administrative Patent Judges.

McKELVEY, Senior Administrative Patent Judge.

**MEMORANDUM OPINION and ORDER**  
**Decision on appeal under 35 U.S.C. § 134**

Upon consideration of the appeal brief and the examiner's answer, it is

ORDERED that the examiner's rejection of claims 21-29 as being unpatentable under 35 U.S.C. § 103 over (1)

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Application for patent filed 28 April 1994. According to applicants, the application on appeal is a continuation of application 08/154,830, filed 19 November 1993, which in turn is said to be a division of application 07/999,446, filed 31 December 1992. The real party in interest is believed to be Shell Oil Company.

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applicants' admissions (apparently based on applicants having presented Jepson<sup>2</sup> claims at one time during the prosecution), (2) Simmonds, (3) Thompson and (4) applicants' own disclosure (presumably page 1, line 10 through page 2, line 2 of the specification), possibly further in view of (5) Begley,<sup>3</sup> is reversed.

FURTHER ORDERED that the examiner's rejection of claims 21-29 as being unpatentable under 35 U.S.C. § 103 over (1) Friswell, (2) Simmonds, (3) Thompson and (4) applicants' own disclosure (presumably page 1, line 10 through page 2, line 2 of the specification), possibly further in view of (5) Begley, is reversed.

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1. The examiner has clearly erred in finding that Simmonds describes the use of perfluorocycloalkanes.

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See Ex parte Jepson, 1917 Dec. Comm'r Pat. 62 (Comm'r Pat. 1917) (original opinion discussing Jepson format for claims).

Begley does not appear to be included in the statements of rejection. Where a reference is relied on to support a rejection, whether or not in a "minor capacity," there would appear to be no excuse for not positively including the reference in the statement of rejection. See In re Hoch, 428 F.2d 1341, 1342 n.3, 166 USPQ 406, 407 n.3 (CCPA 1970).

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A cycloalkane is a hydrocarbon having the empirical formula  $C_nH_{2n}$ . See, e.g., A Dictionary of Chemistry, Oxford University Press, page 144 (1996): "**cycloalkanes** Cyclic saturated hydrocarbons containing a ring of carbon atoms joined by single bonds. They have the general formula  $C_nH_{2n}$  for example cyclohexane,  $C_6H_{12}$ , etc."

The compounds described by Simmonds do not have an empirical formula which fits into the  $C_nH_{2n}$  model. For example, adamantane (col. 4, line 4) has the empirical formula  $C_{10}H_{16}$ ; pinane (col. 4, line 11) has the empirical formula  $C_{10}H_{18}$ ; camphane (col. 4, line 11) also has the empirical formula  $C_{10}H_{18}$ ; and bicyclo[3.3.1]nonane (col. 4, line 1) has the empirical formula  $C_9H_{16}$ . See the attached printouts from CD-ROM versions of the Merck Index (version 12.1a) (page 6, infra) and the Handbook of Chemistry and Physics (CRC Press, Properties of Organic Compounds (1996)) (pages 7-9, infra).

The examiner has not demonstrated that any compound listed in col. 4, lines 1-30 is a perfluorocycloalkane. Accordingly, applicants are correct stating that Simmonds does not describe a perfluorocycloalkane within the scope of claims 21-29.

2. Applicants argue that there is no suggestion, reason, motivation or teaching in the prior art, as a whole, to combine the teachings of the prior art to arrive at applicants' process for determining the possible adulteration of hydrocarbon products as set out in claims 21-29.

It is true that applicants place considerable reliance on the argument that Simmonds does not teach the use of multiple compounds "in differing amounts," an argument which seemingly applies only to claim 27. Nevertheless, applicants also present arguments which apply with equal force to all claims.

The principal difficulty with the examiner's rejections is that they are based on impermissible hindsight.

Friswell is clearly within applicants' field of endeavor, but uses dyes in amounts considerably larger than the amount of tracer called for by applicants' claims.

We doubt whether Thompson involves applicants' field of endeavor, or deals with the problem applicants' sought to solve. Compare In re Wood, 599 F.2d 1032, 1036, 202 USPQ 171, 174 (CCPA 1979) (discussion of analogous art and two-fold test). In any event, Thompson's solution to leak detection does not provide a necessary suggestion for its being combined

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with Simmonds or Friswell in connection with tracing of hydrocarbons.

Simmonds admittedly deals with tracers. But, its tracers do not fall within the scope of the claims on appeal.

Begley while showing the interchangeability of perfluorocycloalkanes (e.g., perfluoromethylcyclohexane) and perfluorobicyclic compounds (e.g., perfluoroadamantane), does so in the context of a study for the detection of a range of perfluorocarbon tracers suitable for long-range atmospheric studies.

Applicants concede that a process similar to their process is known, but that process uses chlorohydrocarbons and chlorofluorocarbons, both of which are known to have adverse effects on the ozone layer (specification, page 1, lines 10-20). For that reason, it is true that one might be motivated to use perfluoro compounds which are known to overcome the ozone problem. The difficulty is that applicants' perfluoro compounds are used in amounts considerably smaller than the admitted prior art described in the specification.

In the end, what surfaces in this case is that one skilled in the art needs the road map of applicants'

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specification to combine the teachings of the references to arrive at applicant's claimed process. A proper § 103 analysis does not permit the examiner to use the specification as a road map. In re McLaughlin, 443 F.2d 1392, 1395, 170 USPQ 209, 212 (CCPA 1971).

**REVERSED.**

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FRED E. McKELVEY, Senior	)	
Administrative Patent Judge	)	
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RICHARD E. SCHAFER	)	BOARD OF PATENT
Administrative Patent Judge	)	APPEALS AND
	)	INTERFERENCES
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_____	)	
JAMESON LEE	)	
Administrative Patent Judge	)	

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